

**PERBEDAAN PEMAHAMAN KONSEP DAN KETERAMPILAN PROSES
SAINS PESERTA DIDIK YANG DIBERI PERLAKUAN MODEL
PROBLEM BASED LEARNING(PBL) DAN PROJECT BASED
LEARNING (PJBL) PADA TEMA PENJERNIHAN AIR**

Oleh
Vini Rahayu
NIM. 12312241012

ABSTRAK

Penelitian ini bertujuan untuk (1) mengetahui adanya perbedaan pemahaman konsep peserta didik yang diberi perlakuan model *Problem Based Learning* (PBL) dan *Project Based Learning* (PBL) serta (2) mengetahui adanya perbedaan keterampilan proses sains peserta didik yang diberi perlakuan model *Problem Based Learning* (PBL) dan *Project Based Learning* (PBL).

Penelitian ini merupakan penelitian eksperimen semu dengan desain “*Nonequivalent Control Group Design*”. Populasi penelitian ini seluruh kelas VII di SMP Negeri 5 Sleman. Sampel dalam penelitian ini dilakukan dengan pemilihan secara acak (*cluster random sampling*) sehingga diperoleh peserta didik kelas VII A sebagai kelas eksperimen 1 dengan perlakuan model *Problem Based Learning* dan peserta didik kelas VII B sebagai kelas eksperimen 2 dengan perlakuan model *Project Based Learning*. Instrumen yang digunakan dalam penelitian ini berupa (1) tes, (2) lembar observasi keterampilan proses sains, dan (3) lembar keterlaksanaan model *Problem Based Learning* dan *Project Based Learning*. Analisis yang digunakan untuk menguji hipotesis penelitian menggunakan aplikasi SPSS 18.0 yaitu uji *independent sample t-test*.

Hasil penelitian menyimpulkan bahwa (1) tidak terdapat perbedaan yang signifikan pada pemahaman konsep antara peserta didik yang menggunakan model *Problem Based Learning* dengan model *Project Based Learning* dengan nilai P sebesar 0,390 dengan taraf signifikan 0,05 dan (2) tidak terdapat perbedaan yang signifikan pada keterampilan proses sains antara peserta didik yang menggunakan model *Problem Based Learning* dengan model *Project Based Learning* dengan nilai P sebesar 0,214 dengan taraf signifikan 0,05. Hasil tersebut disebabkan pada tema penjernihan air peluang munculnya aspek pemahaman konsep dan keterampilan proses sains yang sama, namun demikian tetap terdapat perbedaan pada setiap aspek pemahaman konsep dan keterampilan proses sains.

Kata Kunci : Model pembelajaran *Problem Based Learning*, model pembelajaran *Project Based Learning*, Pemahaman konsep, keterampilan proses sains, Penjernihan air.

***THE DIFFERENCES OF THE UNDERSTANDING OF THE CONCEPTS
DAN SCIENCE PROCESS SKILL BETWEEN STUDENTS USING
PROBLEM BASED LEARNING MODEL AND PROJECT BASED
LEARNING MODEL ON THE THEME OF PURIFICATION
OF WATER***

By :
Vini Rahayu
NIM. 12312241012

ABSTRACT

This research aims to (1) determine differences of understanding of the concept that uses the model of Problem Based Learning and the class that uses the model of Project Based Learning and (2) determine differences of science process skills that uses the model of Problem Based Learning and the class that uses the model of Project Based Learning.

This research is a quasi-experimental design with control group pretest-posttest design. The study population numbered 128 students. The sample in this study was done by using the random selected ((cluster random sampling) in order to obtain learners VII A as the experimental class 1 with a treatment of Problem Based Learning model and learners class VII B as the experimental class 2 with the treatment of Group Investigation model. The instrument used in this research were (1) test the understanding of the concepts, (2) the observation science process skills, and (3) the report sheet of Problem Based Learning model and Project Based Learning model. The analysis used to test research hypotheses using SPSS 18.0 is test of independent sample t-test.

The results of the research concluded that there is no significant difference in the understanding of the concepts among learners who use the model with the Problem Based Learning and Project Based Learning model with a P value of 0.390 with significant level 0,05 and there is no significant difference in science process skills among learners who use the model with the Problem Based Learning and Project Based Learning model with a P value of 0.214 with significant level 0,05. Understanding the concept and science process skills of students between the two classes there is no significant difference on the theme of Purification Of Water for both of these models has characteristics similar but still there is a difference in every aspect of understanding of the concept and science process skills.

Keywords: *Problem Based Learning Model, Project Based Learning Model, the understanding of the concepts, science process skills, Purification Of Water.*